

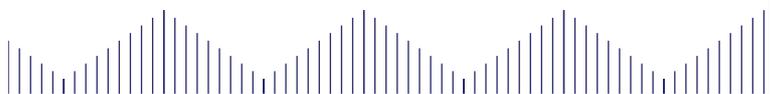


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## **Educator Acceptance of Education 5.0@ UiTM Framework and Initiatives: A Descriptive Analysis**

**Mohd Idzwan Mohd Salleh, Zainuddin Ibrahim, Khairil Iskandar Othman,  
Haslinda Yusoff, Suriyani Ariffin**

*Academic Affairs Division, Universiti Teknologi MARA 40450 Shah Alam,  
Selangor*

*Faculty of Information Management, Universiti Teknologi MARA 40170 Puncak  
Perdana, Selangor  
idzwan201@uitm.edu.my*

*Faculty of Art and Design, Universiti Teknologi MARA 40450 Shah Alam,  
Selangor macintag\_01@uitm.edu.my*

*Faculty of Computer and Mathematical Sciences, Universiti Teknologi MARA  
40450 Shah Alam, Selangor*

*khairil915@uitm.edu.my, suriyani@tmsk.uitm.edu.my*

*Faculty of Accounting, Universiti Teknologi MARA 42300 Puncak Alam,  
Selangor*

*hasli229@uitm.edu.my  
\*Corresponding Author*

*Abstract: As technology is rapidly changing our world, the way of life and a diverse array of the landscape of education, people can get education easy and it can be accessed anytime and anywhere on their own choice. Nowadays, the goal of people go to higher education is different, there is not the only the purpose of better life anymore, but it is the choice of people as students whether they want to get knowledge and skills from the university or through the experience of others or from their own experience. Some educators worry that even though education will never disappear, there will be no university anymore in the future as technology takes place a lot of the ability to teaching and learning. An Education 5.0@UiTM is a new proposed educational transformation framework and initiatives in teaching and learning pedagogy and ecosystem to face a wave of change every day and indirectly promotes many challenges. This initial study was conducted to identify the educator acceptance level of the new proposed framework and initiatives across 26 faculties and 35 campuses of Universiti Teknologi MARA Malaysia. Data was acquired through participated 370 educators in the roadshows and talks about Education 5.0@UiTM framework and initiatives. The results was analysed using descriptive analysis and the*

*findings had provided insights to the university management in strategizing efficient outcome/output and improvement to ensure the successful implementation of Education 5.0@UiTM framework and initiatives by 2021.*

**Keywords:** *Education 5.0@UiTM; educational transformation framework; teaching and learning; Industrial Revolution 4.0; graduate employability*

## **INTRODUCTION**

Industrial Revolution 4.0 (IR4.0) provides a new catalyst for the change of the current education system in Malaysia. It is driven by technological advancements such as artificial intelligence, virtual reality, data analytics, and the Internet of Things. Such advancements in the workplace allow new ways of task completion, bring new value-creation opportunities for organizations and businesses, and maintain partnership and long-term relationships with customers. Based on key findings outlined by Azmi, Kamin, Noordin, and Ahmad (2018), present graduates lacked understanding of the IR4.0 concept; they are unprepared for future careers because they relied too heavily on their academic programs to train them and universities are not adequately preparing students for jobs. Therefore, universities have to regularly review the relevancy of their current academic programs especially to prepare students with necessary skills for future IR4.0 workforce. Besides knowledge and technical skills, universities also have to equip students with extra soft skills to enhance their critical thinking, problem-solving, leadership skills, and lifelong learning to fulfill the changing demands of the IR4.0 job market.

Universiti Teknologi MARA (UiTM), the largest public university in Malaysia, is consistently ranked as the most famous place to study. From July 2019, UiTM have 160,957 students with 17,488 academic and non-academic staffs. In the past 60 years, the university has grown from an institution to a large university with 35 campuses and 515 academic programs. Since 2016, the university has actively engaged in enhancing existing academic programs, launching data analytics lab and smart classrooms in various faculties and state campuses to support the country's IR4.0 initiative. Earlier this year, the university introduced UiTM's Pioneering University

Program to accelerate the design and delivery of high-end technical vocational education and training (HE TVET) programs where the university integrates disruptive technology syllabus in the certificate, degree, and professional programs aligned with the National Policy on Industry 4.0. Apart from this, UiTM has recently launched a new brand of academic ecosystem named as Education 5.0@UiTM intending to humanize higher education learning in response to IR4.0. Accordingly, this paper seeks to identify the acceptance level of UiTM's educators through the preliminary surveys to better understand their teaching practices with the aim to promote Education 5.0@UiTM across the nation.

## **LITERATURE REVIEW**

Education 5.0@UiTM is defined as a learning-centric ecosystem that is sustainable, balanced and principled, driven by values and concepts of Adab and Amanah, powered by intellect and afforded by new, ubiquitous technologies (Academic Affairs Division UiTM, 2019). It is not about sophisticated software and the machine's ability to do what people do, but rather what people can do well with smart technology and machines. Education 5.0@UiTM aims at nourishing the progressive thinkers who are agents of their education, agile, strong principles, and a dynamic and globalized mentality. It liberates learning from the constraints of academic weeks and places, shifts from structured contents to seamless learning to experience meaningful learning. Learning bits and micro-based programs continue to support the learner's learning process. The students now have the option of selecting courses from the best professors recognized for their academic background and expertise. Education 5.0@UiTM can be achieved through the implementation of five pillars as illustrated in Figure 1:

1. Coherent and Relevant Curriculum
2. Innovative Delivery and Assessment
3. Meaningful Learning Experience
4. Transformative Learning Environment
5. Inspiring Educators

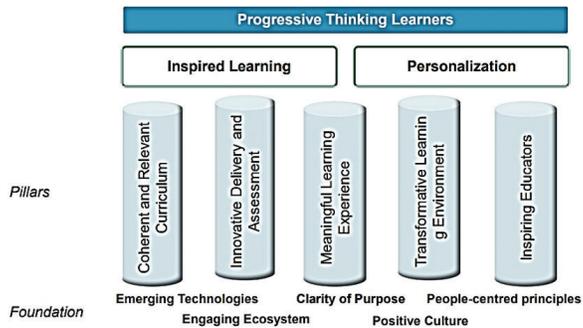


Figure 1: Education 5.0@UiTM Framework

Explaining the framework, the elements of Education 5.0@UiTM are the goal, the pillars, and the foundation. To nurture progressive thinking learners who are creative, innovative, and adaptive to be versatile professionals, job creators, and leaders in future through inspired learning and personalization, the goal can be attained by the means of five pillars of the curriculum, delivery, learning experience, learning environment, and educators driven by clarity of purpose, positive culture, appropriate emerging technologies, engaging ecosystem, and people-centred principles. These pillars will be achieved by different strategies to produce specific outcomes and output for the next three years (2019-2021) to bring changes to the traditional teaching and learning (T&L) landscape in UiTM (Figure 2).

PILLAR	STRATEGY	OUTCOME/OUTPUT 2019	OUTCOME/OUTPUT 2020	OUTCOME/OUTPUT 2021	RESPONSIBILITY
Coherent and Relevant Curriculum	Design and deliver curriculum that promotes values and future thinking, with strong linkages and exposure to the real world	<ul style="list-style-type: none"> <li>□ 1 Smart-industrial-community collaboration Framework</li> <li>□ Multidiscipline and 4IR elective courses across campuses through Wisdom Wednesday</li> <li>□ Credit transfer available for 3 UiTM MOOC</li> <li>□ Establishment of the Institute of Multidisciplinary Studies</li> <li>□ Inception of the Chancellor Scholars Program</li> <li>□ 5 Elective courses individually developed and offered by renowned professors/experts in the area</li> </ul>	<ul style="list-style-type: none"> <li>□ 10% of Diploma program offered are HE TVET</li> <li>□ 3 Industry on campus Curriculum, teaching, MOOC and faculty partnerships with local and global universities : 10 Partnerships</li> <li>□ A LEAD 2 FUTURE: 200 Multidiscipline and 4IR elective courses renowned professors/experts in the area</li> <li>□ Chancellor Scholars Program begin</li> </ul>	<ul style="list-style-type: none"> <li>□ Transdisciplinary/ Hybrid And Modular Based Curriculum started for 3 Programs</li> <li>□ Global learning elements/modules embedded in 100% of final year courses</li> <li>□ Credit transfer available for all UiTM MOOC</li> </ul>	Academic Affairs Division InED ICAEN  <i>Faculties and campuses</i>

Figure 2: Selected Initiatives for 2019-2021 (Academic Affairs Division UiTM, 2019)

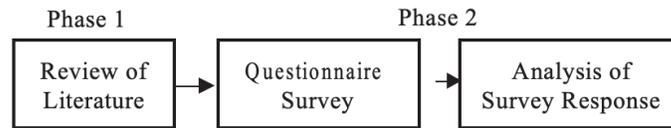
## **RESEARCH METHODOLOGY**

An initial study was conducted between July to October 2019 and employed a quantitative approach using the questionnaire survey for data collection. The educators (lecturers) from UiTM faculties and branch campuses were chosen as the study samples. They were selected during their participation in the Education 5.0@UiTM roadshows held by the Academic Affairs Department of the main Shah Alam campus. In total, 370 educators were participated in these series of talks about the Education 5.0@UiTM framework and initiatives.

A questionnaire survey had been distributed to the identified study samples. This preliminary survey instrument was developed to seek relevant input on the extent of educators' acceptance and understanding of Education 5.0@UiTM framework and initiatives. Also, the instrument was used to seek their opinions about the benefits of the framework and initiatives as well as its implementation in UiTM. The questionnaire survey consisted of 22 questions; which were divided into the three sections, as follows:

1. Section A: General information including educators
2. Section B: General understanding of the framework.
3. Section C: Perception of the benefits of framework implementation.

The questionnaires were distributed to educators via online who participated in the talks. A total of 370 respondents answered the survey based on voluntary participation and quantitative data analysis was carried out using the Statistical Package for Social Sciences (SPSS) software. Specifically, descriptive analysis was performed to investigate the respective educators' acceptance and understanding of Education 5.0@UiTM framework and initiatives as well as the expected outcomes of the framework concepts and practices. Figure 3 shows a summary of the research phases involved in this study, as discussed above.



**Figure 3: Summary of key research phases**

## RESULT AND ANALYSIS

This section describes the participants' demographic information and the key findings derived from the analysis of survey results.

### 4.1 Demographic Profile

In total, there were 138 lecturers, 213 senior lecturers, 15 associate professors, and 4 professors who participated in the surveys from 35 UiTM campuses and 26 faculties around Malaysia.

### 4.2 General Understanding of the Framework and Initiatives

Respondents were asked about their understanding of the Education 5.0@UiTM ecosystem. The results in Table I indicated that 56% (207) of them had sufficiently understood, followed with 25% (92) of them who had little understood, 17% (62) of them were well understood, and 2% (9) of them were poorly understood.

**Table I: Level of understanding about Education 5.0@UiTM ecosystem**

Level of Understanding	Total respondents	Percentage
I don't understand anything	9	2%
Not much - need more information	92	25%
Sufficient to act upon it	207	56%
Very good understanding - I can move this initiative	62	17%
Total respondents	370	100%

Next, the respondents were also asked about their understanding of every Education 5.0@UiTM pillar and initiatives as depicted in Table II. More than 50% of them had sufficiently understood all pillars by practicing related teaching activities during Wisdom Wednesday (WW) and Week Without Wall (WWW), engaged in designing HE TVET

programs and using Smart Classrooms (SC) and Big Data (BD) Labs for T&L.

**Table II: Level of understanding in every pillars and initiative**

Level of Understanding	P1	P2	P3	P4	P5	WW	HETVET	WWW	SC	BD	Average (%)
Nothing	8	7	6	7	5	15	17	8	12	18	3
Not much	80	72	62	75	58	93	120	65	83	115	22
Sufficient	229	224	219	219	222	205	189	204	204	191	57
Very good	53	67	83	69	85	57	44	71	71	46	17
Total respondents	370	370	370	370	370	370	370	370	370	370	100

### 4.3 Acceptance of the Framework and Initiatives

In measuring the acceptance of Education 5.0@UiTM framework and initiatives, 57% (210) of the respondents accepted that the framework would produce better graduates (Table III).

**Table III: Level of acceptance that the framework will produce better graduates**

Acceptance level	Total Respondents	Percentage
Maybe	129	35%
No	5	1%
Not Necessarily	26	7%
Yes	210	57%

imilarly, a total of 241 (65%) of them agreed that the framework also would make learning activities more meaningful (Table IV).

**Table IV: Level of acceptance that the framework will make learning more meaningful**

Acceptance Level	Total Respondents	Percentage
Maybe	112	30%
No	4	1%
Not Necessarily	13	4%
Yes	241	65%

**Table V: Level of educator supported**

Acceptance Level	Total Respondents	Percentage
Maybe	31	8%
Yes with condition	5	1%
Yes	334	90%

## CONCLUSION

This initial study concludes that educators of UiTM had a good understanding of the Education 5.0@UiTM ecosystem including its five strategic pillars and initiatives. Also, they had good acceptance of the Education 5.0@UiTM's framework and its initiatives in offering impactful T&L and enhancing graduates' employability. However, the study has several limitations. Firstly, the study was only used understanding as the key variable to measure acceptance of educators' framework and initiatives. It is highly recommended for future studies to include additional acceptance variables such as external variables, perceived usefulness, perceived ease of use, intention to use, and actual usage by adapting Technology Acceptance Model (TAM)(Venkatesh & Davis, 2000) as the guiding theory. Secondly, the data was acquired through a convenience sampling technique based on the availability of educators to answer the survey questionnaires that limited the generalizability of the findings. Thirdly, several question items were measured using a nominal scale that limited the analysis using inferential statistics. Therefore, it would be useful to employ the ordinal scale for statement items to determine the effects and correlations between the measuring variables so that the acceptance level could be statistically measured either high or low. Fourthly, it would be preferable to perform a comparison of UiTM faculties and campuses of different demographic educators' groups. It would be interesting to compare the results obtained in different educators' groups and see which statements lead to statistically significant differences to identify which group is the effective educators as the champions at the faculties and campuses.

The results of this initial study can be very useful for the management of UiTM campuses to design suitable events and programs in achieving each pillar's outcome/output. Since the implementation of Education 5.0@UiTM is still relatively new, it is crucial for the respective Academic Affairs Department of the university to continuously promote awareness campaigns for Education 5.0@UiTM among both academics and non- academics as well as students to overcome staff resistance, to change their mindset, and to train students more readily in facing IR4.0. It is mainly worth determining the acceptance level of UiTM's educators to build a credible UiTM by cultivating Adab and Amanah in T&L and to generate employable and future-proof graduates for IR4.0.

## **REFERENCES**

- Academic Affairs Division Universiti Teknologi MARA. (2019). *Education 5.0: UiTM Academic Compass, Navigating the Future*. Shah Alam: UiTM Press. <https://doi.org/10.1007/s40196-013-0016-5>
- Azmi, A. N., Kamin, Y., Noordin, M. K., & Ahmad, A. N. (2018). Towards industrial revolution 4.0:
- Employers' expectations on fresh engineering graduates. *International Journal of Engineering and Technology(UAE)*, 7(4), 267–272. <https://doi.org/10.14419/ijet.v7i4.28.22593>
- Venkatesh, V., & Davis, F. D. (2000). A Theoretical Extension of the Technology Acceptance Model: Four Longitudinal Field Studies. *Management Science*, 46(2), 186–204. <https://doi.org/10.1287/mnsc.46.2.186.11926>